

035347

AP20030111 1406 06 JUL 2006

APPENDIX

Our Ref. No.

TFN040110-US

Client No.

TSN2004-0410-US-00

US Publication	File Date	Issue Date	Comments
US 2003/0022041 A1	Jul. 25, '01	Jan. 30, '03	Cited in the International Search Report.
US 2001/0014415 A1	Feb. 13, '01	Aug. 16, '01	Cited in the International Search Report.
US 2002/0094469 A1	Jan. 18, '02	Jul. 18, '02	
Foreign Patent Publication	File Date	Publication Date	Comments
JP-A-No. 2002-289237	June 15, '01	Oct. 4, '02	Disclosed that hydrogen off-gas is purged if it is determined that hydrogen concentration in a hydrogen passage reduces (concentration of impurities is high).
JP-A-No.2002-008691	June 16, '00	Nov. 1, '02	Disclosed that when hydrogen concentration is a first predetermined value or less, an exhaust gas pass valve is open, and when it is a second predetermined value or more which is higher than the first predetermined value, the exhaust gas pass valve is closed.
JP-A-No.02-087479	Sep.26, '88	Mar. 28, '90	Fuel supplied to the Fuel Cell is increased in accordance with the concentration of impurities so as to reduce the concentration of impurities.
JP-A-No.2000-243417	Feb. 23, '99	Sep. 8, '00	If the concentration of impurities increases, the exhaust gas pass valve is open until the concentration reaches to a predetermined value.

JP-A-No.2003-317752	Apr. 19, '02	Nov. 7, '03	Disclosed that the mass flow rate of hydrogen is at a threshold or lower and the existing amount of the impurity gas is at a threshold or higher, the purge is performed.
FR 2 831 994	Nov. 6, '01		Cited in the International Search Report.
EP 1 187 241	Aug. 31, '01	Mar. 13, '02	Cited in the International Search Report.
EP 1 187 241	Aug. 31, '01	Mar. 13, '02	Cited in the International Search Report.
JP 2003-317752	Apr. 19, '02	Nov. 7, '03	Cited in the International Search Report.
International Search Report			
Written Opinion			

INTERNATIONAL SEARCH REPORT

International Application No

PCT/JP2005/000050

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H01M8/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H01M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	FR 2 831 994 A (L'AIR LIQUIDE SOCIETE ANONYME POUR L'ETUDE ET L'EXPLOITATION DES PROCE) 9 May 2003 (2003-05-09) page 2, line 16 - page 3, line 11	1-10
X	US 2003/022041 A1 (BARTON RUSSELL HOWARD ET AL) 30 January 2003 (2003-01-30) paragraphs '0013!', '0014! figure 10A	1,6-10
X	EP 1 187 241 A (NISSAN MOTOR CO., LTD) 13 March 2002 (2002-03-13) paragraphs '0039!', '0040! -/-	1,6-10

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

Z document member of the same patent family

Date of the actual completion of the international search

3 November 2005

Date of mailing of the international search report

11/11/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax (+31-70) 340-3016

Authorized officer

Standaert, F

INTERNATIONAL SEARCH REPORT

International Application No
PCT/JP2005/000050

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	PATENT ABSTRACTS OF JAPAN vol. 2003, no. 12, 5 December 2003 (2003-12-05) & JP 2003 317752 A (NISSAN MOTOR CO LTD), 7 November 2003 (2003-11-07) abstract	1,6-10
A	US 2001/014415 A1 (IIIO MASATOSHI ET AL) 16 August 2001 (2001-08-16) paragraphs '0003!, '0040!, '0041!	1-10

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/JP2005/000050

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
FR 2831994	A	09-05-2003	NONE	
US 2003022041	A1	30-01-2003	WO 03010845 A2 CA 2454685 A1 EP 1410457 A2 JP 2004536438 T	06-02-2003 06-02-2003 21-04-2004 02-12-2004
EP 1187241	A	13-03-2002	JP 3659147 B2 JP 2002093436 A US 2003027024 A1	15-06-2005 29-03-2002 06-02-2003
JP 2003317752	A	07-11-2003	NONE	
US 2001014415	A1	16-08-2001	DE 10107127 A1 JP 3636068 B2 JP 2001307757 A	13-09-2001 06-04-2005 02-11-2001